

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Previously Presented) Method for controlling a direct current motor in one or several fan units, each comprising a fan, which method comprises:
generation of a control signal from a first control unit which is external in relation to the said fan unit;
transmission of the said control signal to the said fan unit;
reception of the transmitted control signal in the said fan unit;
interpretation of the said control signal in a second control unit which is arranged in association with the said fan unit; and
generation, in the said second control unit, of a supply signal for the said direct current motor, on the basis of the control signal generated by the first control unit and received in the fan unit and on the basis of a supply voltage; wherein the method further comprises:
transmission of the control signal together with the supply voltage over a shared communication link, with the control signal being superposed on the supply voltage.
2. (Cancelled)
3. (Previously Presented) Method according to claim 1, wherein the said control signal is a binary data signal.
4. (Previously Presented) Method according to claim 3, wherein the said control signal constitutes a measurement of a certain required proportion of the maximal output of the said direct current motor or a certain required speed of rotation of the direct current motor's fan.
5. (Previously Presented) Method according to claim 1, wherein the said fan unit is used for ventilation of a vehicle seat.

6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Previously Presented) Method according to claim 1, wherein information is communicated from the fan unit to the first control unit.
10. (Currently Amended) Method according to claim 9, wherein the said information is communicated via the windings of the direct current motor comprised in the fan unit, and wherein the method comprises generation of current pulses in a predetermined pattern in the windings of the direct current motor, which pattern corresponds to certain information.
11. (Cancelled)
12. (Previously Presented) Method according claim to 9, wherein the said information comprises data relating to operating state, fault diagnosis or identification information relating to the fan unit.
13. (Previously Presented) Method according to claim 1, wherein each fan unit is provided with an identity to make it possible to transmit information between the first control unit and one of several fan units.
14. (Previously Presented) Method according to claim 13, wherein it comprises coding of the said control signal in a way such that it reflects information about the said identity.
15. (Previously Presented) Method according to claim 1, wherein the first control unit regulates both the fan unit(s) and the heating element(s).

16. (Previously Presented) Arrangement for controlling a direct current motor in a fan unit, which arrangement comprises:

a first control unit that is external in relation to the said fan unit;

a communication link between the said first control unit and the said fan unit;

a second control unit arranged in association with the said fan unit and arranged to generate a supply signal for the said direct current motor on the basis of a control signal generated by the first control unit and transmitted via the said communication link and on the basis of a supply voltage;

wherein the communication link is arranged to transmit the supply voltage together with the said control signal.

17. (Cancelled)

18. (Previously Presented) Arrangement according to claim 16, wherein the said control signal is a binary data signal.

19. (Previously Presented) Arrangement according to claim 16, wherein the said fan unit is arranged for ventilation of vehicle seats.

20. (Previously Presented) Arrangement according to claim 16, wherein the said fan unit also comprises means for detecting speed of rotation.

21. (Cancelled)

22. (Previously Presented) Arrangement according to claim 16, wherein the said second control unit is arranged internally in relation to the said fan unit.

23. (Previously Presented) Arrangement according to claim 16, wherein it comprises at least two fan units that are connected either in series or in parallel.

24. (Previously Presented) Arrangement according to claim 16, wherein it comprises a circuit with a diode and a capacitor that are utilized when supplying the said control signal to the direct current motor while the supply voltage to the direct current motor is maintained.

25. (Previously Presented) Method for controlling a direct current motor for a fan arranged for ventilation of a vehicle seat wherein the method comprises controlling the speed of rotation or the output of the said direct current motor.

26. (Currently Amended) Method according to claim 25, wherein pulse width modulation is used for the said control of the direct current motor, and wherein the pulse frequency of the said pulse width modulated supply is varied in response to the detected speed of rotation.

27. (Cancelled)

28. (Previously Presented) Method according to claim 25, wherein the second control unit generates an additional pulse width modulated signal intended for supplying the windings of the direct current motor.

29. (Previously Presented) Method according to claim 28, wherein the said additional pulse width modulated signal is variable.

30. (Previously Presented) Arrangement for ventilating a vehicle seat, which arrangement comprises a fan, a direct current motor and a control unit, wherein the said control unit is arranged to control the speed of rotation of the said direct current motor, wherein said speed of rotation is controlled by the said control unit in response to external stimuli, and wherein the said external stimuli consist of the output signal from a temperature detector arranged in the vehicle seat.

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Previously Presented) Vehicle seat wherein it is equipped with an arrangement according to claim 16.

35. (Previously Presented) Method for diagnosis and control of a direct current motor in a fan unit with a fan, which method comprises:

a control unit arranged in association with the said direct current motor for controlling the speed of rotation or output of the said direct current motor with,

a supply signal for the said direct current motor being received in the said control unit;

wherein the method comprises;

generation of a diagnostics signal from the control unit arranged in association with the said direct current motor; and transmission of the said diagnostics signal to an additional control unit which is external in relation to the said fan unit.

36. (Previously Presented) Method according to claim 35, wherein the said diagnostics signal is transmitted in the form of a predetermined pattern in the current that is supplied to the windings of the said direct current motor.

37. (Cancelled).